

No.

200100235



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Hickseed West, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

'Mustang 3'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifteenth day of March, in the year two thousand and five.

Attest:


Commissioner
Plant Variety Protection Office
Agricultural Marketing Service


Secretary of Agriculture



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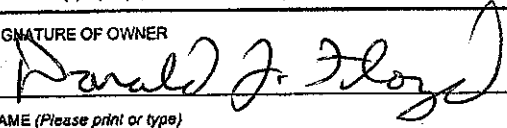
Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

1. NAME OF OWNER Pickseed West, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME Pick MT3		3. VARIETY NAME Mustang 3	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 30190 Hwy 34 SW Albany, OR 97321		5. TELEPHONE (Include area code) 541-967-0123		FOR OFFICIAL USE ONLY PVPO NUMBER 200100235	
		6. FAX (include area code) 541-967-6103		FILING DATE July 27, 2001	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon		9. DATE OF INCORPORATION 1968	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Donald J. Floyd c/o Pickseed West, Inc. 30190 Hwy 34 SW Albany, OR 97321 USA				FILING AND EXAMINATION FEES: \$ 2705- DATE July 2, 2001 CERTIFICATION FEE: \$ 432- DATE 12/29/04	
11. TELEPHONE (Include area code) 541-967-0123		12. FAX (Include area code) 541-967-6103		13. E-MAIL dfloydpswres@proaxis.com	
14. CROP KIND (Common Name) Tall fescue		15. GENUS AND SPECIES NAME OF CROP Festuca arundinacea		16. FAMILY NAME (Botanical) Poaceae	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)			
19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no", go to item 22)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED			
21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE NUMBER 1,2,3, etc. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)		22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)			
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER			
NAME (Please print or type) Donald J. Floyd		NAME (Please print or type)			
CAPACITY OR TITLE Director of Research		DATE June 28, 2001		CAPACITY OR TITLE DATE	

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. **Retain one copy for your files.** All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Has been sold in the USA only; first sale date - August 10, 2000

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. <http://www.ams.usda.gov/lsg/seed/lsg-sd.htm>

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S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

Exhibit A
Breeding History
Mustang 3 (Pick-MT3) Tall Fescue

The parental germplasm of *Mustang3* tall fescue traces its origin to plants selected from old turfs of the United States in a germplasm collection program initiated in 1962, to plants selected from or related to *Rebel* tall fescue (Funk et al., 1981). Fifty percent of the germplasm was selected from or related to *Mustang* tall fescue. Attractive clones were selected from old turfs in Birmingham, AL; Athens, Atlanta, and Milledgeville, GA; Preston, ID; Baltimore, MD; Bayonne, Jersey City, Elizabeth, Princeton, and Cape May, NJ; eastern North Carolina; Philadelphia, PA; Nashville, TN; Lexington, KY; Cincinnati, OH; Dallas, TX; and northern Mississippi. The tall fescue plants selected from old turfs were of unknown origin. All were large patches of turf surviving in stressful environments indicating that they had persisted and developed over a period of many years.

A few hundred attractive, turf-type plants were collected and established in spaced-plant nurseries and/or frequently mowed clonal evaluation trials at Rutgers University. All, but a few dozen of the most promising plants were quickly discarded. The best selections were very different from any tall fescue variety in existence at the time of collection. They produced lower-growing turfs with finer leaves, greater density, darker color, and greater tolerance of close mowing.

The most promising plants were identified by their persistence and appearance in old turfs and their performance in spaced-plant nurseries, mowed clonal evaluation tests, and single-plant progeny trails under turf maintenance. Intercrosses of the best performing plants were subjected to varying cycles of phenotypic and genotypic selection depending on their date of collection. New sources of germplasm were added to the breeding program as it became available from the continuing collection program. Each cycle of selection showed continued progress in producing lower-growing, darker green, attractive plants with improved turf performance scores. Selection was also effective in maintaining high seed yields, and good stress tolerance. Substantial progress was made in developing tall fescues with finer leaves, a lower growth profile, increased persistence under close mowing, and increased density.

Large numbers of single-plant progenies were seeded in turf evaluation trials at the Plant Science Research Farm at Adelphia, NJ in 1993, 1994 and 1995. An additional test was established at the Rutgers turfgrass research facility in North Brunswick, NJ in 1992. The plants selected for progeny evaluation were selected from spaced-plant nurseries at Adelphia following varying cycles of phenotypic and genotypic selection of germplasm selected from old turfs and germplasm selected from or related to *Rebel* tall fescue.

Following a period of summer stress due to heat, drought, and disease in 1996, a total of 3,300 plants were selected from 51 of the best performing single-plant progeny turf plots. Twenty-four progenies selected out of four different populations were from the 1992 test, four progenies selected out of 6 populations were from the 1993 test, two progenies selected out of 3 populations were from the 1994 test, and 21 progenies were selected out of 12 populations from the 1995 test. Selection of progenies was based on performance records as well as appearance at the time the plants were selected from these progeny plots. Selection of plants from each progeny was based on an attractive dark green color, medium-fine leaves, abundant tillering, and freedom

from disease. Selected plants were transferred to a greenhouse and subsequently established in an isolated field nursery at Adelphia in the fall of 1996. Approximately 60 percent of the 3,300 plants were rogued for adverse turf characteristics, such as disease susceptibility, low seed head number, poor turf density, or light green color. A total of 40 plants with the best floret fertility were harvested from this nursery in July of 1997. This seed was sent to Pickseed West, Inc. (PSW) to plant a spaced planted progeny nursery in addition to establishing progeny turf trials at Adelphia, New Jersey.

Fifty progeny seeds from each of the 40 parents selected as *Mustang 3* were germinated August 5, 1997. Developed plantlets of these progenies were spaced planted to an open nursery at PSW in October 1997. Half-sib families were replicated 2x, with approximately 24 progeny plantlets per replication. Developed plants of this nursery were observed during the winter and early spring of 1997/98. Individual plants were discarded if they did not exhibit an attractive dark green color and/or did not appear normally vigorous. Roguing pressure was applied approximately at one percent equally among families. During the spring of 1998, progenies within and among the families were subjected to careful scrutiny for performance under seed production scenario for western Oregon growing conditions. Individuals were discarded pre-anthesis from the nursery if they lacked the ability to produce adequate reproductive panicles in relation to the girth of the plant, lacked high tolerance to stem rust (*Puccinia graminis* Pers:Pers), lacked synchronous flowering time within 2d for the mean of the population, or were noticeably taller than the mean of the population. Individuals were also discarded post-anthesis if they severely succumbed to the pressure of stem rust, developed panicles not typical for the population, or showed seed maturity greater than 2d from the mean date of the population. Approximately 12% of individuals from the population were rogued pre or post anthesis. Roguing was applied approximately equally among the families.

Turf performance scores from Rutgers University for the 1998 growing season showed none of the 40 families inferior one to another. Thus, based upon turf scores and equal roguing of individuals lacking adequate seed production potential, it was decided to bulk seed production in the summer of 1998 from the 40 half-sib families. The bulked seed production was designated as breeder seed for *Mustang 3*.

Breeder seed was planted to produce foundation seed in the fall of 1998. The first crop of foundation seed was produced in 1999. The crop was extremely uniform in plant type, heading date, and mature plant height. The occurrence of off-type plants was low in the 1999 growing season, and was only a trace amount when the field was cropped again in 2000. Off-type plants were considered to be volunteer plants from the field soil weed reserve from previous cropping. Observation of many certified production fields in the 2001 to 2004 seasons (which have been sown from foundation or registered seed) further confirms the uniformity of the variety for plant type, height, and heading date. Thus, the cultivar appears to be stable in its seed production performance, without the appearance of any variant individuals.

Exhibit A
Breeding History
Mustang 3 (Pick-MT3) Tall Fescue

1. 1962 to 1994

Germplasm collection, evaluation, and genetic improvement.

2. 1991 to 1995

Planted single-plant progenies of plants selected from current cycles of population improvement programs in closely mowed turf trials at Adelphia and North Brunswick, NJ.

3. 1996

Selected 3,300 plants from 51 of the best performing single-plant progeny turf plots planted in 1992, 1993, 1994, and 1995. Established selected plants in an isolated spaced-plant nursery at Adelphia, NJ.

4. 1997

Harvested seed from 40 plants with excellent appearance and floret fertility.

Each plant of *Mustang 3* tall fescue traces to at least 20 percent of its ancestral germplasm to plants selected from or related to *Rebel* tall fescue and at least 50 percent of its ancestral germplasm to *Mustang* tall fescue.

5. 1998

After evaluation of progeny from 40 half-sib families for seed production and turf characteristics, breeder seed was produced at Pickseed West, Inc., Albany, OR.

References

- Buckner, Robert C., Jerrell B. Powell, and Rod V. Frakes. 1979. Historical Development *In* Buckner, Robert C., and Lowell P. Bush (editors) Tall Fescue. Agronomy Monograph 20. American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Inc., Publishers. Madison, Wisconsin pages 1-8.
- Funk, C.R., R.E. Engel, W.K. Dickson, and R.H. Hurley. 1981. Registration of Rebel tall fescue. Crop Sci. 21:632.

Exhibit B
Statement of Distinctness
Mustang 3 (Pick-MT3) Tall Fescue

Mustang 3 tall fescue is most similar to the cultivar *Renegade*. *Mustang 3* can, however, be distinguished from *Renegade* by the following characteristics:

1. *Mustang 3* flowers 2 to 3 days earlier than *Renegade* (Table 1).
2. *Mustang 3* produces shorter panicle length than *Renegade* (Table 1).

Table 1. Anthesis date and panicle length of tall fescue cultivars evaluated fro two spring seasons in western Oregon. †

Cultivar	<u>Anthesis date</u>		<u>Panicle length (cm)</u>	
	2002	2003	2002	2003
Mustang 3	June 4	May 31	19.3	27.5
Renegade	June 7	June 2	22.1	30.9
Silverado	June 8	June 3	19.1	30.6
Bonsai	June 7	June 2	22.6	31.0
Bonanza	June 6	June 1	24.5	36.3
Shortstop	June 6	June 1	20.3	29.1
<u>LSD@0.05</u>	2 days	1 day	2.1	3.2

† Experiment was established via spaced planting 60 individuals of each cultivar between three replications (20 plants per each replication). Experiment was established in November 2001 at the Pickseed West, Inc. research facility, Albany, OR. Treatments received approximately 30 pounds/acre of N-P-K late November 2001 and again in late November 2002. Approximately 100 pound of N was applied early spring of 2002 and again in 2003.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C
(TALL & MEADOW FESCUES)

OBJECTIVE DESCRIPTION OF VARIETY
TALL & MEADOW FESCUES
(*Festuca* spp.)

NAME OF APPLICANT(S) Pickseed West, Inc.	TEMPORARY DESIGNATION Pick MT3	VARIETY NAME Mustang 3
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) 30190 Hwy 34 SW Albany, OR 97321		FOR OFFICIAL USE ONLY PVPO NUMBER 200100235

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk * are characteristics which should be recorded.

* 1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

<u>1</u> 1 = <i>F. arundinacea</i> (Tall)		<u>Turf Types</u>			
1 = Kentucky 31	2 = Rebel	3 = Olympic	4 = Bonanza	5 = Arid	6 = Rebel II
7 = Shortstop	8 = Silverado	9 = Rebel Jr.	10 = Mini Mustang	11 = Crewcut	12 = Bonsai
13 = Reinbrandt		<u>Forage Types</u>			
20 = Kentucky 31	21 = Martin	22 = Forager	23 = Mozark		
24 = Kenhy	25 = AU Triumph	26 = Fawn	27 = Cajun		
<u>2</u> 2 = <i>F. pratensis</i> (Meadow)					
30 = Admira	31 = Beaumont	32 = Comtessa	33 = Ensign	34 = Trader	

* 2. CYTOLOGY:

42 Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

0 Transition Zone 2 West 2 Northeast 0 Other (Specify): _____

* 4. MATURITY: (Date First Headed, 10% of Panicle Emergence)

6 Maturity Class 1 = Very early () 2 = AU Triumph 3 = Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

4. MATURITY: (continued)

6 = Bonanza

7 = Late (Silverado)

8 = ()

9 = Very late

Date Headed May 10Location Albany, OR4 Days earlier than 8Maturity same as 47 Days later than 1

Comparison Variety

* 5. MATURE PLANT HEIGHT CM: (Average of 100 culms from crown to top of panicle, if panicle is nodding, straighten)

7 1 6 cm Height2 9 8 cm Shorter than 1Height same as 7 cm Taller than

Comparison Variety

* INTERNODE LENGTH CM: (First internode subtending the flag leaf)

1 2 4 cm Internode Length0 7 1 cm Shorter than 1Length same as 7 cm Longer than

Comparison Variety

* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf collar)

3 3 8 cm Height2 1 3 cm Shorter than 1Height same as 70 6 4 cm Taller than 12

Comparison Variety

* 6. GROWTH HABIT: (Mature Plants)

6 1 = Prostrate ()

3 = Semiprostrate ()

5 = Horizontal ()

7 = Semierect (Rebel)

9 = Erect (Mini Mustang)

* 7. RHIZOMES (Psuedo):

 mm Length 1 1 = Absent () 2 = Rare (Rebel) 3 = Common ()

* 8. LEAF BLADE: (Tiller leaves/ turf color)

* 5 Color: 1 = Light green ()

3 = Medium light green ()

5 = Green ()

7 = Medium dark green () 9 = Very dark green ()

5 Specify rating of comparison variety on a scale of 1-9, 9=very dark green* 1 Anthocyanin: 1 = Absent () 9 = Present ()* 1 Basal Hairs: 1 = Absent () 9 = Present ()* 9 Margins: 1 = Smooth () 5 = Semi-rough () 9 = Rough ()

3. LEAF BLADE: (continued)

* 5 Width Class: 1 = Very coarse () 3 = Coarse () 5 = Medium ()
7 = Fine () 9 = Very Fine ()

* TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf)

0 9 2 cm Tiller Leaf Length0 4 5 cm Shorter than 4Length same as 802 7 cm ~~longer~~ than 13
longer

Comparison Variety

* TILLER LEAF WIDTH MM:

4 4 mm Tiller Leaf Width1 1 mm Narrower than 4Width same as 71 1 mm Longer than 12

Comparison Variety

FLAG LEAF LENGTH CM:

0 6 9 cm Flag Leaf Length2 7 cm Shorter than 4Length same as 8 cm Longer than

Comparison Variety

FLAG LEAF WIDTH MM:

3 0 mm Flag Leaf Width1 0 mm Narrower than 4Width same as 80 8 mm Wider than 12

Comparison Variety

* 9. LEAF SHEATH: (Basal Portion)

* 2 Anthocyanin (seedling): 1 = Absent (K31)

9 = Present () 2 = very faint

* 2 Auricle Hairiness: 1 = Absent ()

9 = Present () 2 = very sparse

* 10. PANICLE: (At seed maturity except where noted.)

* 5 Shape: 1 = Narrow-tapering ()

5 = Ovate ()

7 = Oblong ()

9 = Other (specify)

* 4 Type: 1 = Compact (appressed)
4 = loosely compact

5 = Intermediate ()

7 = Open ()

9 = Other (specify)

* 6 Orientation: 1 = Nodding ()

9 = Erect ()

6 = semi-erect

* 9 Branch Pubescence: 1 = Glabrous ()

9 = Pubescent ()

* 1 Anther Color (At anthesis): 1 = Yellowish Green

2 = Green

3 = Bluish Green

Anthesis Date-
June 5

4 = Purplish

5 = Reddish

6 = Other (Specify)

* 4 Glume Color (At anthesis): 1 = Yellowish Green

2 = Green

3 = Bluish Green

4 = Purplish

5 = Reddish

6 = Other (Specify)

* 15 6 cm Panicle Length (from base to tip, if nodding, straighten; after anthesis)8 0 cm Shorter than 4Length same as 83 7 cm Longer than 12

Comparison Variety

* 11. SEED: (With Lemma & Pelea)

* 2.7 00 mg per 1000 seeds

3.8 3 mg Less than 4
 Weight same as 8
 _____ mg More than _____ } Comparison Variety

PALEA: (Keels or Margins)

2 Hairs: 1 = Absent ()

5 = Short (Missouri 96)

9 = Long () 2 = very sparse on margin

LEMMA:

1 Hairs: 1 = Absent (Kenhy)

5 = Several ()

9 = Many (Missouri 96)

5.7 mm Lemma Length (Mature)1.2 mm Lemma Width0.5 mm Shorter than 10.2 mm Narrower than 1Length same as 7Width same as 12

_____ mm Longer than _____

_____ mm Wider than _____

Comparison Variety

Comparison Variety

*AWNS: 9 AWNS: 1 = Absent () 9 = Present (Falcon)97 % Plants with awns1.0 mm Awn length (Of those present.)0.3 mm Shorter than 12Length same as 1

_____ mm Longer than _____

Comparison Variety

12. DISEASE, INSECT, AND NEMATODE REACTION: (0 = Not Tested 1 = Least Resistant 9 = Most Resistant)

0 Melting-out *Drechslera poae*0 Blind Seed *Gloeotinia temulenta*0 Leaf Spot *D. siccans*0 Dollar Spot *Lanzia, Mollerdiscus* spp.0 Net Blotch *D. dictyoides*0 Stem Rust *Puccinia graminis*7 Brown Patch *Rhizoctonia solani* 2002 NTEP*7 T. Blight *Typhula incarnata* 2003 NTEP0 C. Leaf Spot *Cercospora fectuae*9 Pythium Blight *Pythium* spp. 2003 NTEP0 Pink Snow Mold *Gerlachia nivalis*0 Powdery Mildew *Erysiphe graminis*0 Silver Top *F. tricinatum, F. roseum*0 Crown Rust *Puccinia coronata*5 Other Disease pink patch, 2002 NTEP0 Other Insect _____0 Other Nematode _____

* Data reported interpreted from 2002/2003 NTEP progress reports of the 2001 sown trials.

13. ENVIRONMENTAL STRESS

0 Drought Stress

1 = Susceptible ()

5 = Tolerant ()

9 = Resistant ()

13. ENVIRONMENTAL STRESS: (continued)

☐ Shade Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()
☐ Winter Stress 1 = Susceptible () 5 = Tolerant () 9 = Resistant ()

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application variety is less than comparison variety 2 = Same as 3 = More than, better, greater, darker, etc.

Character	Varieties	Rating	Character	Varieties	Rating
Leaf Width	Rebel Jr.	2	Leaf Color	Bonsai	2
Panicle Color	Bonanza, Bonsai	2	Panicle Shape	Bonsai	2
Seed Size, length	Shortstop	2	Cold Injury	not specifically tested	
Winter Color	not specifically tested		Heat	not specifically tested	
Disease	not specifically tested				

* 15. EXPERIMENTAL: Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Pickseed West, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER Pick MT3	3. VARIETY NAME Mustang 3
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 30190 Hwy 34 SW Albany, OR 97321		5. TELEPHONE (include area code) 541-967-0123	6. FAX (include area code) 541-967-6103
		7. PVPO NUMBER 200100235	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?
If no, give name of country ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?
☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (if needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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